

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1           1. (Currently amended) A system for enabling components to transfer  
2     data between each other, the system comprising:  
3           a plurality of components including a first component having a data object  
4     that implements a universal data transfer interface; and  
5           a second component capable of receiving the data object and invoking the  
6     universal data transfer interface to cause a data transfer session object (DTSO) to  
7     be sent to the second component, and capable of providing a viewer object that  
8     enables the third component to display transferred data associated with the  
9     DTSO's data type, wherein the second component acts as an intermediary  
10    component, which facilitates transferring of the DTSO from the first component  
11    to a third component;  
12           wherein the DTSO is capable of being invoked by the third component to  
13    transfer data between the first component and the third component;  
14           wherein the DTSO includes instructions to return data types supported by  
15    the first component;  
16           wherein the DTSO includes instructions that enable the first component to  
17    receive asynchronous event notifications;  
18           wherein the DTSO includes instructions to return device type and  
19    operating status of the first ~~component~~, component; and

20 wherein the DTSO includes instructions to enable the first component or  
21 the third component to negotiate with each other to select a transfer medium to  
22 use to transfer data based upon the type of ~~data; data, and~~  
23 ~~wherein a session associated with data transfer is leased subject to periodic~~  
24 ~~renewal by the first component at an interval of time specified by an initial lease~~  
25 ~~duration parameter.~~

1 2. (Cancelled)

1 3. (Previously presented) The system as set forth in claim 1 wherein the  
2 third component sends a second DTSO to the first component to be used by the  
3 first component for receiving data transmitted from the third component.

1 4. (Previously presented) The system as set forth in claim 1 wherein the  
2 third component receives the DTSO from the first component to be used by the  
3 third component for receiving data transmitted from the first component.

1 5. (Previously presented) The system as set forth in claim 1 wherein the  
2 universal data transfer interface and the DTSO have source-specific object-  
3 oriented mobile code that can be interpreted and performed by the first component  
4 or the third component.

1 6. (Previously presented) The system as set forth in claim 1 wherein the  
2 DTSO comprises instructions to enable the first component or the third  
3 component to negotiate with each other to transfer data, to select a  
4 communications protocol configured to transfer data between each other based  
5 upon a type of data to be transferred.

1           7. (Previously presented) The system as set forth in claim 1 wherein the  
2   DTSO is configured to indicate completion responsive to expiration of a data  
3   transfer lease by the first component or by the third component, or responsive to  
4   the first component or to the third component indicating that the data transfer has  
5   completed or failed.

1           8. (Currently amended) A system for enabling components to transfer data  
2   between each other, the system comprising:  
3       a first component having a first data object that implements a first  
4   universal data transfer interface;  
5       a second component having a second data object that implements a second  
6   universal data transfer interface; and  
7       a third component capable of receiving the first data object and the second  
8   data object, and invoking the first universal data transfer interface and the second  
9   universal data transfer interface to use a data transfer session object (DTSO) to  
10   transfer data between the first component and the second component when the  
11   first component has data to transfer to the second component, and capable of  
12   providing a viewer object that enables the third component to display transferred  
13   data associated with the DTSO's data type, wherein the third component acts as  
14   an intermediary component, which facilitates transferring of the DTSO from the  
15   first component to the second component;  
16       wherein the DTSO includes instructions to return data types supported by  
17   the first component;  
18       wherein the DTSO includes instructions that enable the first component to  
19   receive asynchronous event notifications;  
20       wherein the DTSO includes instructions to return device type and  
21   operating status of the first ~~component~~; component; and

22 wherein the DTSO includes instructions to enable the first component to  
23 negotiate with the second component to select a transfer medium to use to transfer  
24 data based upon the type of ~~data~~, and data.  
25 wherein a session associated with data transfer is leased subject to periodic  
26 renewal by the first component at an interval of time specified by an initial lease  
27 duration parameter.

1 9. (Previously presented) The system as set forth in claim 8 wherein the  
2 third component sends the DTSO to the first component to be used by the first  
3 component for receiving data transmitted from the second component.

1 10. (Previously presented) The system as set forth in claim 8 wherein the  
2 third component sends the DTSO to the second component to be used by the  
3 second component for receiving data transmitted from the first component.

1 11. (Previously presented) The system as set forth in claim 8 wherein the  
2 DTSO is configured to indicate completion responsive to expiration of a data  
3 transfer lease by the first component or the second component, or responsive to  
4 the first component or the second component indicating that the data transfer has  
5 completed or failed.

1 12. (Currently amended) A method for enabling a plurality of  
2 components to transfer data between each other, the method comprising:  
3 invoking, with a second component having a data object that implements a  
4 universal data transfer interface, the universal data transfer interface of a first  
5 component of a plurality of components to cause a data transfer session object  
6 (DTSO) to be sent to the second component, wherein the second component acts

7 as an intermediary component and is capable of providing a viewer object that  
8 enables the third component to display transferred data associated with the  
9 DTSO's data type, which facilitates transferring of the DTSO from the first  
10 component to a third component; and  
11         invoking the DTSO with the third component to transfer data between the  
12 first component and the third component when the first component has data to  
13 transfer to the third component;  
14         wherein the DTSO includes instructions to return data types supported by  
15 the first component;  
16         wherein the DTSO includes instructions that enable the first component to  
17 receive asynchronous event notifications;  
18         wherein the DTSO includes instructions to return device type and  
19 operating status of the first component;  
20         wherein the DTSO includes instructions to enable the first component or  
21 the third component to negotiate with each other to select a transfer medium to  
22 use to transfer data based upon the type of data; and  
23         wherein a session associated with data transfer is leased subject to periodic  
24 renewal by the first component at an interval of time specified by an initial lease  
25 duration parameter.

1         13. (Cancelled)

1         14. (Previously presented) The method as set forth in claim 12 further  
2 comprising sending a second DTSO to the first component to be used by the first  
3 component for receiving data transmitted from the third component.

1         15. (Previously presented) The method as set forth in claim 12 further

2 comprising receiving the DTSO from the first component to be used by the third  
3 component for receiving data transmitted from the first component.

1 16. (Previously presented) The method as set forth in claim 12 wherein the  
2 universal data transfer interface and the DTSO have source-specific object-  
3 oriented mobile code that can be interpreted and performed by the first component  
4 or the third component.

1 17. (Previously presented) The method as set forth in claim 12 wherein the  
2 DTSO comprises instructions to enable the first component or the third  
3 component to negotiate with each other to transfer data, to select a  
4 communications protocol configured to transfer data between each other based  
5 upon a type of data to be transferred.

1 18. (Previously presented) The method as set forth in claim 12 further  
2 comprising configuring the DTSO to indicate completion responsive to expiration  
3 of a data transfer lease by the first component or by the third component, or  
4 responsive to the first component or to the third component indicating that the  
5 data transfer has completed or failed.

1 19. (Currently amended) A method for enabling components to  
2 transfer data between each other, the method comprising:  
3 invoking a first universal data transfer interface of a first data object  
4 belonging to a first component and a second universal data transfer interface of a  
5 second data object belonging to a second component when the first component  
6 has data to transfer to the second component, wherein the second component acts  
7 as an intermediary component and is capable of providing a viewer object that

8 enables the third component to display transferred data associated with the  
9 DTSO's data type, which facilitates transferring of the DTSO from the first  
10 component to a third component;  
11 obtaining a data transfer session object (DTSO) from one of the invoked  
12 first universal data transfer interface or the second universal data transfer  
13 interface; and  
14 using the DTSO to transfer data between the first component and the  
15 second component;  
16 wherein the DTSO includes instructions to return data types supported by  
17 the first component;  
18 wherein the DTSO includes instructions that enable the first component to  
19 receive asynchronous event notifications;  
20 wherein the DTSO includes instructions to return device type and  
21 operating status of the first component;  
22 wherein the DTSO includes instructions to enable the first component or  
23 the third component to negotiate with each other to select a transfer medium to  
24 use to transfer data based upon the type of data; and  
25 wherein a session associated with data transfer is leased subject to periodic  
26 renewal by the first component at an interval of time specified by an initial lease  
27 duration parameter.

1 20. (Previously presented) The method as set forth in claim 19 further  
2 comprising sending the DTSO to the first component to be used by the first  
3 component for receiving data transmitted from the second component.

1 21. (Previously presented) The method as set forth in claim 19 further  
2 comprising sending the DTSO to the second component to be used by the second

3 component for receiving data transmitted from the first component.

1 22. (Previously presented) The method as set forth in claim 19 further  
2 comprising configuring the DTSO to indicate completion responsive to expiration  
3 of a data transfer lease by the first component or by the third component, or  
4 responsive to the first component or to the third component indicating that the  
5 data transfer has completed or failed.

1 23. (Currently amended) A computer readable medium having stored  
2 thereon instructions for enabling components to transfer data between each other,  
3 which when executed by one or more processors, causes the processors to  
4 perform:  
5 invoking, with a second component, a universal data transfer interface of a  
6 data object belonging to a first component of a plurality of components to cause a  
7 data transfer session object (DTSO) to be sent to the second component when the  
8 first component has data to transfer to a third component, wherein the second  
9 component acts as an intermediary component and is capable of providing a  
10 viewer object that enables the third component to display transferred data  
11 associated with the DTSO's data type, which facilitates transferring of the DTSO  
12 from the first component to the third component; and  
13 invoking the DTSO with the at least one of the plurality of components to  
14 transfer data between the first component and the third component;  
15 wherein the DTSO includes instructions to return data types supported by  
16 the first component;  
17 wherein the DTSO includes instructions that enable the first component to  
18 receive asynchronous event notifications;



19 wherein the DTSO includes instructions to return device type and  
20 operating status of the first component;  
21 wherein the DTSO includes instructions to enable the first component or  
22 the third component to negotiate with each other to select a transfer medium to  
23 use to transfer data based upon the type of data; and  
24 wherein a session associated with data transfer is leased subject to periodic  
25 renewal by the first component at an interval of time specified by an initial lease  
26 duration parameter.

1 24. (Cancelled)

1 25. (Previously presented) The medium as set forth in claim 23 further  
2 comprising sending a second DTSO to the first component to be used by the first  
3 component for receiving data transmitted from the third component.

1 26. (Previously presented) The medium as set forth in claim 23 further  
2 comprising receiving the DTSO from the first component to be used by the third  
3 component for receiving data transmitted from the first component.

1 27. (Previously presented) The medium as set forth in claim 23 wherein  
2 the universal data transfer interface and the DTSO have source-specific object-  
3 oriented mobile code that can be interpreted and performed by the first component  
4 or the third component.

1 28. (Previously presented) The medium as set forth in claim 23 wherein  
2 the DTSO comprises instructions to enable the first component or the third  
3 component to negotiate with each other to transfer data, to select a

4 communications protocol configured to transfer data between each other based  
5 upon a type of data to be transferred.

1 29. (Previously presented) The medium as set forth in claim 23 further  
2 comprising configuring the DTSO to indicate completion responsive to expiration  
3 of a data transfer lease by the first component or by the third component, or  
4 responsive to the first component or to the third component indicating that the  
5 data transfer has completed or failed.

1 30. (Currently amended) A computer readable medium having stored  
2 thereon instructions for enabling components to transfer data between each other,  
3 which when executed by one or more processors, causes the processors to  
4 perform:

5 invoking a first universal data transfer interface of a first data object  
6 belonging to a first component and a second universal data transfer interface of a  
7 second data object belonging to a second component when the first component  
8 has data to transfer to the second component, wherein the second component acts  
9 as an intermediary component, and is capable of providing a viewer object that  
10 enables the third component to display transferred data associated with the  
11 DTSO's data type, which facilitates transferring of the DTSO from the first  
12 component to a third component;

13 obtaining a data transfer session object (DTSO) from one of the invoked  
14 first universal data transfer interface or the second universal data transfer  
15 interface; and

16 using the DTSO to transfer data between the first component and the  
17 second component;

18            wherein the DTSO includes instructions to return data types supported by  
19     the first component;  
20            wherein the DTSO includes instructions that enable the first component to  
21     receive asynchronous event notifications;  
22            wherein the DTSO includes instructions to return device type and  
23     operating status of the first component;  
24            wherein the DTSO includes instructions to enable the first component or  
25     the third component to negotiate with each other to select a transfer medium to  
26            use to transfer data based upon the type of data; and  
27            wherein a session associated with data transfer is leased subject to periodic  
28     renewal by the first component at an interval of time specified by an initial lease  
29     duration parameter.

1            31. (Previously presented) The medium as set forth in claim 30 further  
2     comprising sending the DTSO to the first component to be used by the first  
3     component for receiving data transmitted from the second component.

1            32. (Previously presented) The medium as set forth in claim 30 further  
2     comprising sending the DTSO to the second component to be used by the second  
3     component for receiving data transmitted from the first component.

1            33. (Previously presented) The medium as set forth in claim 30 further  
2     comprising configuring the DTSO to indicate completion responsive to expiration  
3     of a data transfer lease by the first component or by the third component, or  
4     responsive to the first component or to the third component indicating that the  
5     data transfer has completed or failed.